

REMARKS

The Applicants thank the Examiner for the thorough examination of the application. The specification has been amended to correct a minor error. No new matter is believed to be added to the application by this Amendment.

Entry of Amendment

Entry of this Amendment under 37 C.F.R. §1.116 is respectfully requested because it places the application in condition for allowance. Alternately, entry is requested because it places the application in better form for appeal.

Status of the Claims

Claims 1-3 and 5-15 are pending in the application. Support for the amendments to claims 1 and 6 can be found in Figure 1.

Rejection Under 35 U.S.C. 102(e) Over Katsuda

Claims 1-3 and 5-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Katsuda (U.S. Patent No. 6,234,521). Applicants respectfully traverse.

The Present Invention and Its Advantages

The present invention pertains to an airbag inflator that helps reduce the amount of NO_x generated by the combustion of a gas generating agent. The present invention finds a typical embodiment in instant claim 1:

1. An inflator comprising a gas generating agent, a reducing material, an ignition means, and a coolant/filter, wherein said reducing material is placed in the inflator.

In the invention, the reducing material produces a radical, •NH₂, by combustion heat. The production of this radical from 5-aminotetrazole (5-AT) is shown at page 12, line 13 of the specification, where:



In an embodiment shown in the Examples of the invention, a gas generating agent including nitroguanidine (NQ), strontium nitrate (Sr(NO₃)₂) and carboxymethyl cellulose (CMC) is used. Then, 5-AT is separately used as the reducing agent.

Distinctions of the Invention over Katsuda

Katsuda pertains to an airbag inflator in an airbag apparatus. Katsuda fails to disclose a separate reducing material.

Katsuda discusses that nitroguanidine (NQ) is incorporated into a gas generating agent and is used as fuel. See Katsuda at column 5, lines 21-27. Katsuda's gas generating agent generates a combustion gas that includes N₂, CO₂, H₂O and a small amount of NO_x. The NO_x will be completely consumed by the

combustion of the gas generating agent. Katsuda teaches nothing pertaining to the generation of nitrogenous radicals. As a result, there is no teaching or suggestion in Katsuda of a separate reducing material.

In contrast, claims 1 and 6 of the invention recites "a gas generating agent" and "a reducing material" as separate components. Katsuda therefore fails to teach each and every element of claims 1 and 6.

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). *See also* MPEP 2131.

Katsuda thus fails to anticipate the invention set forth in independent claims 1 and 6. Claims dependent upon claims 1 and 6 are patentable for at least the above reasons.

This rejection is overcome and withdrawal thereof is respectfully requested.

Information Disclosure Statement

The Applicants thank the Examiner for considering the Information Disclosure Statement filed September 30, 2003 and for making initialed sheet 1 and sheet 2 of the PTO-1449 form of record in the application in the Office Action mailed August 19, 2004.

Conclusion

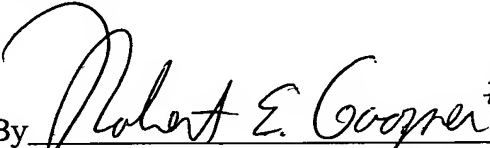
The Examiner's rejection has been successfully traversed. No issues remain. The Examiner is accordingly respectfully requested to allow the application.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert E. Goozner, Ph.D. (Reg. No. 42,593) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment(s):

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